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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,589	09/18/2003	Roger P. Jackson	10,251	1926
7590 02/23/2006 John C. McMahon PO Box 30069 Kansas City, MO 64112			EXAMINER RAMANA, ANURADHA	
			ART UNIT 3733	PAPER NUMBER

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/666,589

Applicant(s)

JACKSON, ROGER P.

Examiner

Anu Ramana

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5, 10-18, 28 and 30-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5, 10-18, 28 and 30-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 10-14, 18, 28, 30, 31 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Ray (US 6,306,170).

Ray discloses a spacer 24 with an anchoring plate or “end cap” 26 having wing portions 60 extending laterally on opposite sides of the spacer wherein end cap 26 is removably secured to spacer 24 by detents or pawls 42 received in slots 44 on the spacer (Figs. 2 and 5, col. 3, lines 49-67, col. 4 and col. 5, lines 1-56).

The method steps of claim 28 are performed when the Ray assembly is used to stabilize a vertebral joint.

Regarding claim 31, the limitation, “sized and shaped to substantially follow the anterior and side curvature of the outer edges of respective vertebrae during usage,” it is noted that “while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140

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F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 2, 10-12, 14, 18, 28, 30, 31 and 32 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 6, 14, 25 and 26 of U.S. Patent No. 6,926,737 ('737 herein) in view of Ray (US 6,306,170).

Claims 6, 14, 15, 25 and 26 of '737 discloses a screw-in type or "threaded" implant or "spacer" and an end cap having upper and lower elongate surfaces that extend outwardly on either side of the implant during use and are sized and shaped to directly engage and support facing surfaces of vertebrae.

Claims 6, 14, 15, 25 and 26 of '737 discloses all elements of the claimed invention except for: (1) wing portions defining the upper and lower elongate surfaces; and (2) the end cap being removably securable to the spacer by resilient pawls received in recesses formed in the implant.

Ray teaches a plate or "end cap" 26 removably secured to a threaded implant or spacer 24 by detents or "resilient pawls" 42 on the end cap received in corresponding depressions or recesses 44 on spacer 24; and lateral tangs or wings that are inserted in the disc space to stabilize the end cap (Figs. 2, 3 and 5, col. 3, lines 49-67, col. 4 and col. 5, lines 1-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided resilient pawls on the end cap received in corresponding recesses of the spacer of claim 5 of '737, as taught by Ray, to removably secure the end cap to the spacer and to have provided lateral tangs or wings, as taught

by Ray, to define the upper and lower elongate surfaces extending outwardly on both sides of the implant for stability.

The method steps of claim 28 are rendered obvious by the above discussion.

Claims 3-5 and 15-17 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 6 of U.S. Patent No. 6,926,737 ('737 herein) in view of Ray (US 6,306,170) and Shapiro et al. (US 6,436,139).

The combination of claim 6 of '737 and Ray discloses all elements of the claimed invention except for: a spacer member having substantially concave lateral surfaces; a cylindrical shaped discontinuous surface; and a funnel-shaped spacer member.

Shapiro et al. teach a funnel-shaped spacer with substantially concave lateral surfaces to limit rotation in at least one direction (Figs. 7 and 8, col. 1, lines 54-67 and col. 2, lines 1-4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a funnel-shaped spacer with a discontinuous surface in the spacer of the combination of claim 6 ('737) and Ray, as taught by Shapiro et al., to limit rotation in at least one direction.

Claims 2-3, 10-16, 18, 28, 30, 31 and 32 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4-7, 11-14 and 19-22 of copending Application No. 10/666,074 ('074 herein) in view of Ray (US 6,306,170).

Claims 4-7, 11-14 and 20-22 of '074 disclose all elements of the claimed invention except for wings on the end cap or stabilizing structure.

Ray teaches a plate or "end cap" 26 removably secured to a threaded implant or spacer 24 by detents or "resilient pawls" 42 on the end cap received in corresponding depressions or recesses 44 on spacer 24; and lateral tangs or wings that are inserted in the disc space to stabilize the end cap (Figs. 2, 3 and 5, col. 3, lines 49-67, col. 4 and col. 5, lines 1-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided lateral tangs or wings on the end cap or stabilizing structure of '074, as taught by Ray, to prevent expulsion of the implant of the combination of '074 and Ray.

This is a provisional obviousness-type double patenting rejection.

Claims 5 and 17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 24 and 29 of copending Application No. 10/666,074 ('074 herein) in view of Ray (US 6,306,170).

Claims 24 and 29 of '074 discloses all elements of the claimed invention except for an end cap having wings on the spacer.

Ray teaches a plate or "end cap" 26 removably secured to a threaded implant or spacer 24 by detents or "resilient pawls" 42 on the end cap received in corresponding depressions or recesses 44 on spacer 24; and lateral tangs or wings that are inserted in the disc space to stabilize the end cap (Figs. 2, 3 and 5, col. 3, lines 49-67, col. 4 and col. 5, lines 1-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided an end cap having wings in the spacer of claims 24 and 29 of '074, as taught by Ray, for stabilization of the spacer of the combination of claims 24 and 29 of '074 and Ray and to prevent its expulsion.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

Applicant's arguments submitted under "REMARKS" in the response filed on December 1, 2005, with respect to claims 2-5, 10-18, 28 and 30-32 have been considered. Applicant's arguments with respect to the rejections of claims 10-14 as being anticipated by Ray (US 6,306,170) are not persuasive for the following reasons.

Tangs or "wings" 60 of anchoring plate or "end cap" 26 have superior and inferior surfaces that engage facing vertebral surfaces and extend along the anterior edges thereof (col. 5, lines 47-51).

It is also noted that Applicant's arguments "that the tangs of Ray fail to support the bone all the way out to the lateral sides (page 12 of "REMARKS")" are not directed to claimed features.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

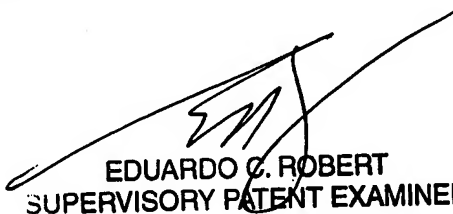
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anu Ramana whose telephone number is (571) 272-4718. The examiner can normally be reached Monday through Friday between 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached at (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AR *Annabella Ramana*
February 13, 2006


EDUARDO C. ROBERT
SUPERVISORY PATENT EXAMINER